ABSTRACT OF THE DISCLOSURE

A fragmentation-resistant instrument panel is provided which includes an outer layer having an inner surface and a core of expanded plastic foam of a predetermined shape. The core is secured to the inner surface of the outer layer. An inner layer is fixedly secured to the inner surface of the core to encapsulate the foam. A V-shaped groove in the core is provided where the groove has an open side open to the to the inner surface of the inner layer and a closed side adjacent to the inner surface of the outerlayer. The instrument panel will be resistant to fragmentation when an impact force is applied to the inner layer by the air bag and the V-shaped groove provides for a hinge point when the air bag is deployed such that the instrument panel directs the air bag toward a vehicle occupant. A method of manufacturing the instrument panel is also provided.